

REMARKS AND RESPONSES

No claims have been amended and cancelled. As a result, claims 1-12 remain pending in the present application. Reconsideration of the application in view of the following comments is respectfully requested.

Claim Rejection - 35 U.S.C. §103

With respect to Paragraphs 1 and 2 of the Office Action, the Office Action rejected claims 1-12 under 35 U.S.C. §103(a) as being unpatentable over Kitajima (US 5,475,396) in view of Ozawa (US 6,462,724). Of the rejected claims, only claims 1, 7, and 10 are independent. Accordingly, applicants respectfully request that the rejection be withdrawn.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (MPEP §2143)

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). (MPEP §2143.03 All Claim Limitations Must Be Taught or Suggested)

In claim 1 of the present application, a gate voltage deformation device is included between the gate of the first TFT and an input terminal of the scan line. Moreover, in dependent claim 2, the gate deformation device is defined to comprise a resistor, which has a resistance between 10 – 100 Ω /sq as defined in claim 3. The gate deformation device is used to distort the voltage waveform of scan lines to solve the problems of screen flicker, imperfect exposure junctions and inhomogeneous brightness in the TFT-LCD.

However in Fig. 9 of Kitajima, the resistances 5a-5i indicate the resistances of the scanning lines 20a to 20c. Those resistances should desirably have as low a level as possible, in order to reduce waveform deteriorations such as distortions of the voltage waveforms, and may have a sheet resistance e.g., 0.1 – 10 Ω /sq (Column 8, lines 31-39). That is, resistances 5a-5i are intrinsic resistances of scan lines 20a – 20c, and hence the resistances of resistances 5a-5i should be as low as possible to avoid distorting voltage waveform passed by scan lines 20a – 20c. Furthermore in Fig. 10 of Kitajima, the voltage waveform of V_{G1} to V_{G2} passed on scan lines 20a – 20c are perfect square waves, i.e. no distortion on the voltage waveform at all.

In light of the forgoing, Kitajima does not teach what the Office Action relies upon it as supposedly teaching. That is, even if Kitajima and Ozawa were to be combined in the manner proposed, the proposed combination would not show all of the novel physical features of claim 1 as discussed above in connection with Kitajima. Therefore, the novel features of claim 1 produce new and unexpected results and hence are unobvious and patentable over these references.

Accordingly, Applicant respectfully submits that independent claim 1 is allowable over the art of record and respectfully requests the 35 U.S.C. §103(a) rejection of claim 1 to be reconsidered and withdrawn. In addition, insofar as claims 2-6 depend from independent claim 1 and add further limitations thereto, the 35 U.S.C. §103(a) rejection of these claims should be withdrawn as well.

Similarly, independent claims 7 and 10 either contains a resistor as a gate deformation device or contains a gate voltage deformation means. Therefore, Kitajima also does not disclose the limitations described above. Accordingly, Applicant respectfully submits that independent claims 7 and 10 are allowable over the art of record and respectfully requests the 35 U.S.C. §103(a) rejection of claims 7 and 10 to be reconsidered and withdrawn. In addition, insofar as claims 8-9 and 11-12 respectively depend from independent claims 7 and 10 and add further limitations thereto, the 35 U.S.C. §103(a) rejection of these claims should be withdrawn as well.

Reconsideration and withdrawal of this rejection is respectfully requested. Other cited references of record have been studied, and are found no more relevant to the present invention than the applied art.

Conclusions

For all of the above reasons, applicants submit that the specification and claims are now in proper form, and that the claims define patentably over prior arts. Therefore applicants respectfully request issuance for this case at the Office Action's earliest convenience.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: January 4, 2006